

K000196

FEB 18 2000

**Summary of 510(k) Safety and Effectiveness**

January 20, 2000

**1. General Information**

Device Generic Name: Enzyme Immunoassay, Myoglobin  
Device Trade Name: ACCESS® Myoglobin assay  
Applicant's Name and Address: Beckman Coulter, Inc.  
1000 Lake Hazeltine Drive  
Chaska, MN 55318

Contact Person: Jan Olsen

**2. Predicate Device**

Behring Diagnostics N Latex Myoglobin Reagents  
Behringwerke AG  
Marburg, Germany

**3. Device Description**

The ACCESS® Myoglobin assay is a paramagnetic-particle, chemiluminescent immunoassay for the quantitative determination of myoglobin levels in human serum or plasma (heparin and EDTA), using the ACCESS® Immunoassay System.

**4. Comparison of Technological Characteristics**

The ACCESS® Myoglobin Assay and the Behring N Latex Myoglobin test are for the measurement of Myoglobin in human serum. Both tests utilize the binding of myoglobin to specific antibodies. Both tests utilize light in their respective detection systems--the ACCESS® Myoglobin test measures light production from a chemiluminescent reaction using a luminometer, while the Behring N Latex Myoglobin test measures light scattering intensity using a nephelometer. The ACCESS® Myoglobin test is an enzyme immunoassay, while the Behring N Latex Myoglobin assay is a particle enhanced nephelometric assay. The ACCESS® Myoglobin Calibrators (six levels) are prepared from human heart myoglobin and a buffered BSA matrix, while the Behring N Latex Myoglobin Calibrator (single level from which dilutions are made) is prepared from human myoglobin and human serum-based matrix.

**5. Summary of Studies**

Precision studies: Within run imprecision ranges from 2.06 % CV (high human serum pool) to 3.69 % CV (low human serum pool). Between run imprecision ranges from 4.47% CV (high human serum pool) to 6.39 % CV (low human serum pool).

Spiking and Dilution Recovery: Linearity studies performed by diluting three human serum samples containing Myoglobin with Myoglobin Calibrator S0 (zero) gives an average recovery of 100 %.

Correlation: A comparison of serum Myoglobin values from 93 samples run in both the ACCESS® Myoglobin assay and the Behring N Latex Myoglobin test gives the following statistical data:  $r = 0.998$   $y = 0.916x + 11.31$ . A comparison of 51 paired serum and plasma (EDTA) samples run in the ACCESS® Myoglobin assay gives the following statistical data:  $r = 0.999$ ,  $y = 0.854x + 3.073$ .

Analytical Sensitivity: The lowest detectable level of Myoglobin distinguishable from zero (Myoglobin Calibrator S0) with 95% confidence is 8.9 ng/ml.

**6. Conclusion**

The ACCESS® Myoglobin reagents when utilized with the ACCESS® Immunoassay Analyzer are substantially equivalent to another test currently in commercial distribution for the measurement of Myoglobin.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Food and Drug Administration  
2098 Gaither Road  
Rockville MD 20850

**FEB 18 2000**

Ms. Jan Olsen  
Staff Regulatory Specialist  
Beckman Coulter, Inc.  
1000 Lake Hazeltine Drive  
Chaska, Minnesota 55318-1084

Re: K000196  
Trade Name: Access® Myoglobin Reagents  
Regulatory Class: II  
Product Code: DDR  
Dated: January 20, 2000  
Received: January 21, 2000

Dear Ms. Olsen:

We have reviewed your Section 510(k) notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895.

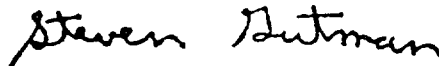
A substantially equivalent determination assumes compliance with the Current Good Manufacturing Practice requirements, as set forth in the Quality System Regulation (QS) for Medical Devices: General regulation (21 CFR Part 820) and that, through periodic QS inspections, the Food and Drug Administration (FDA) will verify such assumptions. Failure to comply with the GMP regulation may result in regulatory action. In addition, FDA may publish further announcements concerning your device in the Federal Register. Please note: this response to your premarket notification submission does not affect any obligation you might have under sections 531 through 542 of the Act for devices under the Electronic Product Radiation Control provisions, or other Federal laws or regulations.

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This letter will allow you to begin marketing your device as described in your 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4588. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its internet address "<http://www.fda.gov/cdrh/dsma/dsmamain.html>".

Sincerely yours,

A handwritten signature in black ink that reads "Steven Gutman". The signature is written in a cursive, slightly slanted style.

Steven I. Gutman, M.D., M.B.A.  
Director  
Division of Clinical Laboratory Devices  
Office of Device Evaluation  
Center for Devices and Radiological Health

Enclosure

Page 1 of 1510(k) Number (if known): K000196Device Name: Access® Myoglobin Reagents**Indications For Use:**

The ACCESS® Myoglobin assay is a paramagnetic-particle, chemiluminescent immunoassay for the quantitative determination of Myoglobin levels in human serum or plasma, using the Access Immunoassay System. Measurement of Myoglobin aids in the rapid diagnosis of heart or renal disease.

Jean Cooper  
(Division Sign-Off)  
Division of Clinical Laboratory Devices  
510(k) Number K000196

(PLEASE DO NOT WRITE BELOW THIS LINE—CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

Prescription Use ✓  
(Per 21 CFR 801.109)

OR

Over-The Counter Use \_\_\_\_\_

(Optional Format 1-2-96)